

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES UPGRADING ALL SIGNALS TO LED, ADDING AN ADDITIONAL EASTBOUND SIGNAL HEAD AND ADDING APS AND COUNTDOWN PEDESTRIAN SIGNALS FOR THE EXISTING CROSSING ON THE WEST LEG OF MD 31 AT THE INTERSECTION OF MD 31 AND UNIONTOWN ROAD IN CARROLL COUNTY. MD 31 IS ASSUMED TO RUN IN AN EAST - WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE.

CONTROLLER REQUIREMENTS

THE EXISTING CONTROLLER AND ASSOCIATED HARNESSES WILL REMAIN. SHA WILL INSTALL THE 2-WIRE CENTRAL CONTROL UNIT IN THE EXISTING BASE MOUNTED CABINET.

THE CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

Mr. John Concannon
Assistant District Engineer - Traffic
Phone: 301-624-8140

Ms. Andrea Abend
District Utility Engineer
Phone: 301-624-8115

Mr. Ray Johnson
Assistant District Engineer - Maintenance
Phone: 301-624-8105

Mr. Edward Rodenhizer
Chief, SHA Traffic Signal Shop
Phone: 410-787-7650

Mr. Richard L. Daff Sr.
Chief, Traffic Operations Division
Phone: 410-787-7630

The Power Company Representative Is:
Baltimore Gas & Electric
7317 Parkway Drive South
Hanover, MD 21076
Phone: 410-859-9334

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO.	QUANTITY	DESCRIPTION
9570	28 SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN: 1 EACH - SHIELD ASSEMBLY (36 IN. X 75 IN.) "EAST, MD 31, LEFT ARROW" 1 EACH - SHIELD ASSEMBLY (24 IN. X 51 IN.) "EAST, MD 31, RIGHT ARROW"
9571	66 SF	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN: 2 EACH - R10-3(1) (9 IN. X 15 IN.) "PUSH BUTTON TO CROSS NEW WINDSOR ROAD" 1 EACH - SHIELD ASSEMBLY (24 IN. X 51 IN.) "WEST, MD 31, RIGHT ARROW" 1 EACH - SHIELD ASSEMBLY (36 IN. X 75 IN.) "WEST, MD 218, LEFT ARROW" 2 EACH - D-3(1) DUAL FACED (96 IN. X 16 IN.) "UNIONTOWN RD" 2 EACH - R3-5(L) (30"X36")

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
2002	1 CY	TEST PIT EXCAVATION
5005	250 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
6002	109 SF	4 INCH CONCRETE SIDEWALK
8001	27 EA	12 INCH R-Y-G LED SIGNAL HEAD
8003	1 EA	2 WIRE CENTRAL CONTROL UNIT
8010	2 EA	AUDIBLE / TACTILE PEDESTRIAN PUSHBUTTON
8011	1 EA	BREAKAWAY PEDESTAL POLE - ANY SIZE
8014	2 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
8017	1 EA	REMOVE AND DISPOSE OF EQUIPMENT
8019	1 EA	REMOVE FOUNDATION 12 INCH DEPTH
8026	12 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8027	10 SF	DETECTABLE WARNING SURFACES
8030	1 CY	CONCRETE FOR SIGNAL FOUNDATION
8031	38 LF	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
8033	12 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8045	28 SF	INSTALL GROUND MOUNTED SIGN
8046	66 SF	INSTALL OVERHEAD SIGN
8056	1 EA	CUT CLEAN GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8058	340 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG)
8060	350 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)
8061	100 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG)

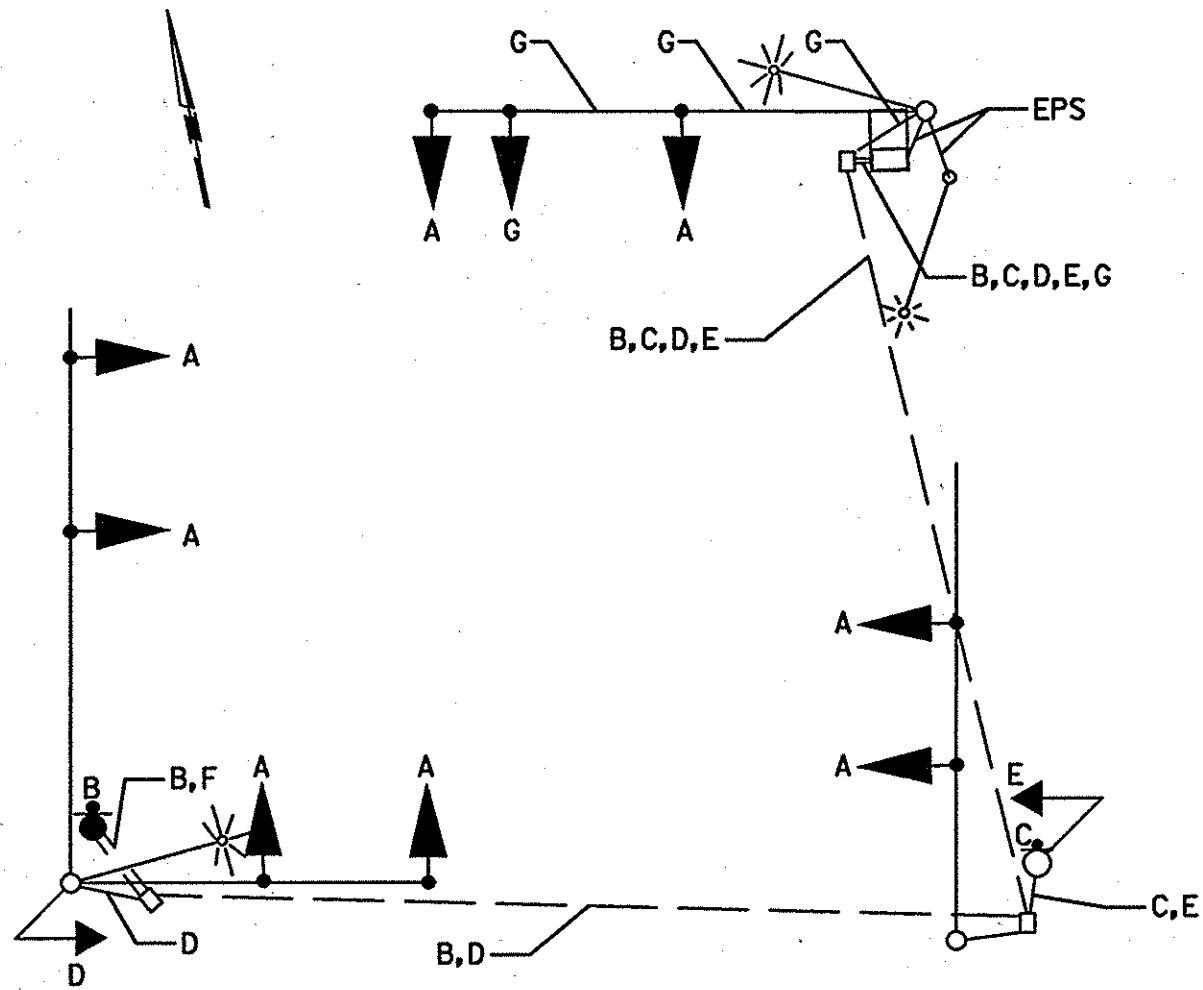
EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO. QUANTITY DESCRIPTION

NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

WIRING DIAGRAM



- A - USE EXISTING WIRING
- B, C - 2-CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
- D, E - 5-CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
- F - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- G - 7-CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
- EPS - EXISTING POWER SOURCE

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	
	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	
PHASE 2 & 6	G	G	G	G	G	R	R	R	R	DW	DW	
PHASE 2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	
PHASE 4 & 8	R	R	R	R	R	G	G	G	G	DW	DW	
PHASE 4 & 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW	
PHASE 4 & 8 ALT	R	R	R	R	R	G	G	G	G	W	W	
PEDESTRIAN CLEARANCE	R	R	R	R	R	G	G	G	G	FL/DW	FL/DW	
PHASE 4 & 8 ALT CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 31 (NEW WINDSOR ROAD) AT UNIONTOWN ROAD

GENERAL INFORMATION SHEET

SCALE NONE DATE 5/2007 CONTRACT NO. AT9255185

DESIGNED BY SDY COUNTY CARROLL
DRAWN BY SDY LOGMILE 06003109.60
CHECKED BY JWB T.I.M.S. NO. H939
F.A.P. NO. TOD NO.

DRAWING NO. TS-2465G-GI SHEET NO. 2 OF 2